

THE WESTERN AUSTRALIAN NATURALIST

Vol. 11

October 4, 1968

No. 1

THE SQUIRRELS OF SOUTH PERTH

By LINDSAY E. SEDGWICK, South Perth.

The Five-lined Palm Squirrel (*Funambulus pennanti*)* was introduced to this country in about 1898 by Lt.-Col. E. A. Le Souef, who was at that time the Director of the South Perth Zoological Gardens. The squirrels were given the run of the gardens, where they have thrived and have been a feature of the zoo ever since. They have now moved out of the limits of the zoo and are occasionally to be seen in the residential areas of South Perth and Como. The following notes are based on four and a half years casual observation made while living in the district (1964 to 1968). All the places where I have observed squirrels are plotted on the map of South Perth; I have never seen the animal outside of this general area.

The densest population of squirrels is still located where they started, in the zoo. They show themselves quite boldly to the visitor, but are always alert, and move off briskly when approached too closely. They climb trees with much ease, but run on the ground to feed and are often seen around rubbish bins, visitors' picnic sites, and in the cages and pens of other animals searching for food.

Apart from the zoo, the following places have been seen to be occupied by squirrels.

A (as shown on map)—the front garden of a private house in Labouchere Road. A fleeting glimpse of one animal obtained as I drove past. The garden was dominated by two large palm trees, and the squirrels seem to favour these trees.

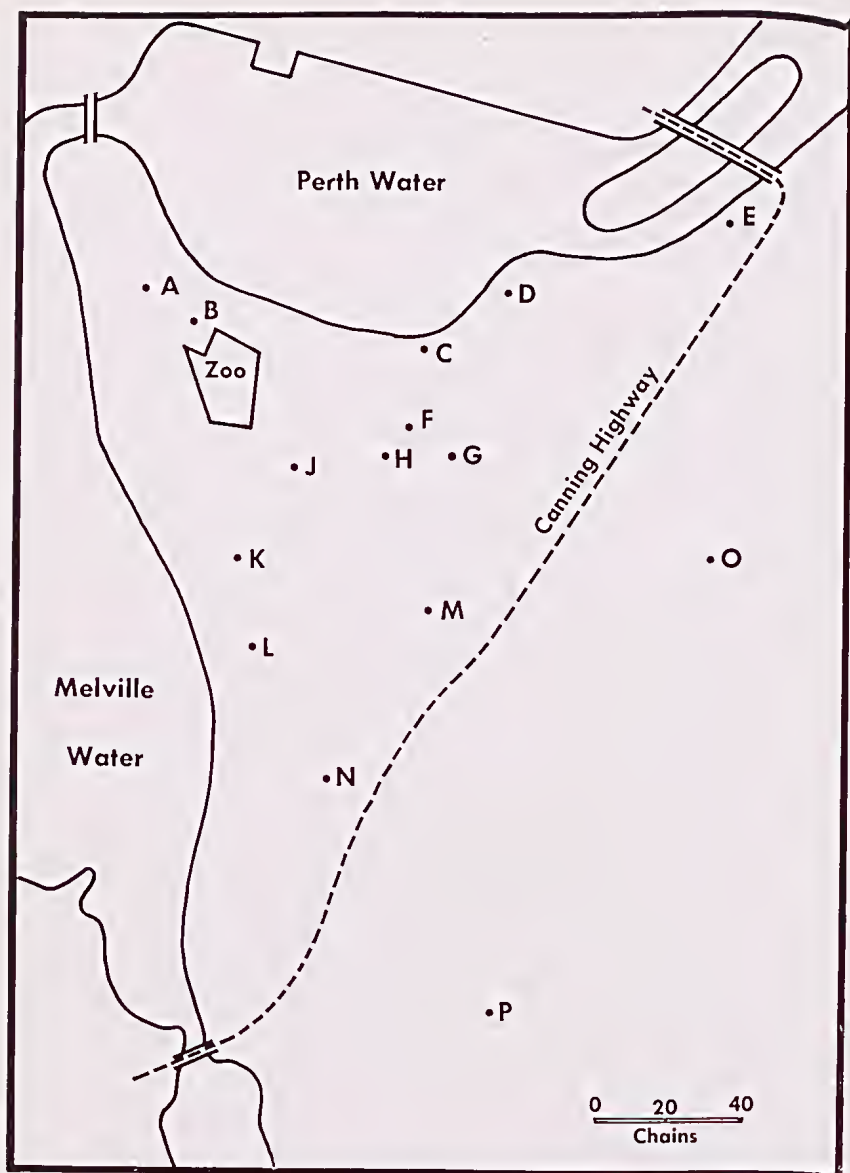
B—a car park at the Windsor Hotel, and a group of palms on the opposite side of the road. On ten occasions pairs or single squirrels have been seen. This site is only about 150 yards from the zoo, but when the animals are disturbed, they tend to take refuge in the palms opposite the hotel rather than the vegetation in the zoo.

C—A group of palms near the Coode Street jetty. A pair drew attention to themselves by their rapid, sharp, rather Goldfinch-like calls as they moved round and round the trunk and through the foliage. This pattern of behaviour seems to be a territorial display.

D—the South Perth rubbish dump. A pair were seen foraging over a huge mound of refuse which included a fair amount of food scraps.

E—McCallum Park. A single animal seen as I drove past, bounding across the lawn and up into a date palm.

* For the identification I am indebted to Mr. Tom Spence, Director of the Zoological Gardens, South Perth. He states: "To my surprise, I have found that our Palm Squirrels are not the Palm Squirrel, *Funambulus palmarum*. They are the Five-lined Palm Squirrel, *F. pennanti*. Such is tradition, that the common Palm Squirrel commonly held in captivity in Europe is always called *F. palmarum* and it now seems wrongly. *F. palmarum*, with three stripes, is a shy elusive forest species while *F. pennanti* is the common commensal around towns and villages in India."



Map of South Perth showing localities where squirrels have been observed.

F—Wesley College. After the zoo, the next largest population is probably located in the college grounds, where in the course of my work I have seen them many hundreds of times. Their numbers do not seem to have changed much since 1964 and I estimate the average size of the population at about eight to twelve individuals. They are most often seen around an avenue of pines, but they move out to feed in areas used by students during the lunch hour. They venture into every part of the grounds at times, and occasionally enter rooms and roofs.

Vertical brick or masonry walls are climbed with almost the same facility as trees. The squirrels apparently breed within the college grounds. Territorial and courtship display are frequently seen, and young animals appear from time to time. The arrival of squirrels at the college is fairly recent. There were none to be seen when I was living on the premises, as a student, from 1946 to 1950. The recollections of various members of the teaching staff suggest that the invasion occurred quite suddenly in the mid-fifties.

G—the back garden of my home in Tate Street. On four occasions single squirrels have appeared, but none have remained for any length of time; as soon as they are disturbed they disappear over the picket fence and do not return for months.

H—the back yard of a grocer's shop. Two squirrels were seen cleaning out empty cardboard cartons which contained tiny scraps of food in the corners.

J—Forrest Street School. Individuals seen on three occasions, feeding on the ground in the school yard, and then taking shelter in a large pine tree.

K—the southern end of Royal Perth Golf Links. One squirrel seen in the branches of a Western Australian Peppermint (*Agonis*).

L—the front garden of a private house in Gardner Street. While driving past I noticed a squirrel scampering along the rafters of a vine trellis.

M—the South Perth Civic Centre. One animal was disturbed as it fed on crusts of bread which had been thrown near a rubbish bin. It made its escape up the side of a brick wall and into the guttering.

N—Como School. One animal seen in the school yard.

O—Ngal-a Mothercraft Centre. One noted as I drove past, dashing up the trunk of a pine tree.

P—Crawshaw Crescent. A squirrel ran across the road in front of my car, and vanished in the front garden of a private house. This area has less trees than are found in the longer settled parts of South Perth, and the gardens consist of lawns, small shrubs and herbs.

From these observations it seems that there is a low density population distributed fairly evenly from Mill Point to about Canning Highway, but with a few high density populations in favoured locations such as the zoo and Wesley College. Alternatively, it might be concluded that the resident population is restricted to the zoo and Wesley College (and perhaps other centres that I have overlooked) and that individuals venture out into the intervening areas from time to time. However, it is difficult to draw conclusions from the data because of the methods used to collect them. For example, most of the squirrels were observed in public places rather than in the private gardens which occupy a much greater area. This may well be because I am much more free to observe in public places, but it may also be that the squirrels really are concentrated there, perhaps because of better food supplies, or because they need rather large open spaces to move in, or for some other ecological reason. Certainly in my own garden, which is typical of thousands and which I have been able to observe intensively, the presence of squirrels is very intermittent.

So far the spread of the squirrels has been very slow; about two and a half miles in seventy years. Possibly this is the limit, and a squirrel starting at a permanent colony such as the zoo is just not likely to wander much further afield than Canning High-

way. On the other hand, the squirrels may have been isolated in Mill Point in the early decades of this century by unsuitable habitat in the areas to the south and east. They do seem to show a preference for certain types of exotic trees, such as palms (locations A, B, C, E and perhaps L) and pines (locations F, J, and O). I have rarely seen them in eucalypts, and it is likely that the sand plain scrub and farmland which once was found in this district would have been unattractive habitat for them. With more recent development of the land there are now unbroken stretches of residential suburb, with their improved supplies of food, water and exotic garden trees, which might allow the squirrels to gradually expand their range until their colonies are found throughout the metropolitan area.

A STUDY OF HOMING PERFORMANCE IN THE SENEGAL DOVE

By R. H. STRANGER, West Perth.

INTRODUCTION

Banding of the introduced Senegal Dove (*Streptopelia senegalensis*) in the metropolitan area of Perth has revealed that it is a highly sedentary species. Individuals were repeatedly retrapped throughout the year at their original trapping sites and 56 birds which were banded when adult (determined as such by the fully spotted plumage, and the eye and feet colouration) and recovered, throughout the year, other than by retrapping at their banding places (=B.P.) were recovered at the distances shown in Table 1.

TABLE 1.—Recoveries of banded doves at varying distances.

| Recovery distance from B.P. in miles | Number of birds recovered | Percentages per distance | | | |
|--------------------------------------|---------------------------|--------------------------|--------|--------|--|
| 0- $\frac{1}{4}$ | * 38 | 67.9 | } 80.4 | } 91.2 | |
| $\frac{1}{2}$ | † 7 | 12.5 | | | |
| $\frac{3}{4}$ | 3 | 5.4 | } 10.8 | } 9.0 | |
| 1 | 3 | 5.4 | | | |
| ? | 1 | 1.8 | } 9.0 | } 9.0 | |
| 2 | 1 | 1.8 | | | |
| 2 $\frac{1}{4}$ | 1 | 1.8 | | | |
| 5 | 1 | 1.8 | | | |
| 6 | 1 | 1.8 | | | |
| | =56 | =100 | =100 | =100 | |

N.B. 0.2% has to be deducted from the percentage columns to allow correction to 100%.

It is obvious that the adult is of a very sedentary nature, namely, that having established itself in a territory it then occupies the territory throughout the year.

*One bird was later recovered $\frac{1}{2}$ a mile from B.P.

†One bird had previously been recovered $1\frac{1}{2}$ miles from B.P.